

IN THE SPECIFICATION:

Please amend the paragraphs at page 2, lines 7 to 25, as follows:

One problem is that copying the data through a data transfer protocol takes numerous CPU cycles and memory accesses and, thus, slows the transmission process. A method that is sometimes used to avoid copying the data through data transfer protocol is creating a data pointer ~~114~~ in the application layer and sending that pointer to the network and transmission layers instead of copying the data itself. Fewer CPU cycles and memory accesses are used to transmit the data pointer ~~114~~ than to copy the data itself. The network layers use the data pointer ~~114~~ to locate the data cached in memory and transmit it through the communications network.

One problem with the method of using a data pointer ~~114~~ to speed up the transmission process is that it is that much of the efficiency of transferring the data pointer ~~114~~ is lost when the transport layer subsequently needs to read all the data to calculate the checksum. It takes fewer CPU cycles and memory accesses to transfer a data pointer ~~114~~ than to copy data through protocol. But CPU cycles and memory accesses are required to read the data cached or stored in memory in order to calculate the checksums. Thus, the economy otherwise gained by transferring a data pointer ~~114~~ instead of copying data is diminished because the CPU cycles and memory accesses are required to read the data to calculate the checksums.